

What is claimed is:

- 1 1. A method comprising periodically adjusting an access point output power in  
2 a wireless network to reduce potential interference while communicating with  
3 associated mobile stations.
- 1 2. The method of claim 1 wherein periodically adjusting an access point output  
2 power comprises determining a path loss for each associated mobile station.
- 1 3. The method of claim 1 further comprising adjusting the access point output  
2 power when a mobile station associates.
- 1 4. The method of claim 3 further comprising adjusting the access point output  
2 power when the mobile station disassociates.
- 1 5. The method of claim 1 further comprising transmitting beacons at a full  
2 access point output power.
- 1 6. A method comprising:  
2 transmitting a beacon frame in a wireless network;  
3 receiving a signal from a mobile station; and  
4 adjusting an access point output power to reliably communicate with the  
5 mobile station.
- 1 7. The method of claim 6 wherein adjusting an access point output power  
2 comprises reducing the output power of frames other than beacon frames.
- 1 8. The method of claim 7 wherein adjusting an access point output power  
2 further comprises transmitting beacon frames at a maximum power.

- 1 9. The method of claim 6 wherein adjusting an access point output power  
2 comprises calculating a first path loss to the mobile station.
- 1 10. The method of claim 9 wherein adjusting an access point output power  
2 further comprises setting the output power to overcome the path loss.
- 1 11. The method of claim 9 further comprising receiving a signal from a second  
2 mobile station.
- 1 12. The method of claim 11 further comprising calculating a second path loss to  
2 the second mobile station.
- 1 13. The method of claim 12 further comprising adjusting the output power to  
2 overcome a greater of the first path loss and the second path loss.
- 1 14. A method comprising:  
2 transmitting a beacon frame from an access point at a full power level; and  
3 transmitting frames other than beacon frames from the access point at less  
4 than the full power level.
- 1 15. The method of claim 14 wherein transmitting frames other than beacon  
2 frames comprises transmitting at a power level high enough to overcome a path loss  
3 to an associated mobile station.
- 1 16. The method of claim 15 further comprising adjusting the power level when  
2 the associated mobile station disassociates.
- 1 17. The method of claim 15 further comprising adjusting the power level when  
2 another mobile station associates.

1 18. The method of claim 14 further comprising periodically readjusting the  
2 power level.

1 19. The method of claim 18 wherein periodically adjusting the power level  
2 comprises determining a path loss to an associated mobile station.

1 20. An apparatus including a medium to hold machine-accessible instructions  
2 that when accessed result in a machine performing:  
3 transmitting a beacon frame from an access point at a full power level; and  
4 transmitting frames other than beacon frames from the access point at less  
5 than the full power level.

1 21. The apparatus of claim 20 wherein transmitting frames other than beacon  
2 frames comprises transmitting at a power level high enough to overcome a path loss  
3 to an associated mobile station.

1 22. The apparatus of claim 21 wherein machine-accessible instructions, when  
2 accessed, result in the machine further performing adjusting the power level when  
3 the associated mobile station disassociates.

1 23. The apparatus of claim 21 wherein machine-accessible instructions, when  
2 accessed, result in the machine further performing adjusting the power level when  
3 another mobile station associates.

1 24. An electronic system comprising:  
2 an antenna;  
3 a variable output power radio interface coupled to the antenna;  
4 a processing apparatus coupled to the variable output power radio interface  
5 to periodically adjust an output power to reduce potential interference while  
6 communicating with associated mobile stations; and

7           an Ethernet interface coupled to the processing apparatus.

1   25.    The electronic system of claim 24 further comprising an apparatus including  
2   a medium to hold machine-accessible instructions that when accessed result in the  
3   processing apparatus performing:  
4           transmitting a beacon frame at a full power level; and  
5           transmitting frames other than beacon frames at less than the full power  
6   level.

1   26.    The electronic system of claim 25 wherein transmitting frames other than  
2   beacon frames comprises transmitting at a power level high enough to overcome a  
3   path loss to an associated mobile station.